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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/580,419	07/28/2006	Kiyotaka Yoshii	128127	1964

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EXAMINER	
MCCLELLAND, KIMBERLY KEIL	
ART UNIT	PAPER NUMBER
1791	

MAIL DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/580,419	YOSHII, KIYOTAKA	
	Examiner	Art Unit	
	KIMBERLY K. MCCLELLAND	1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 May 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-6* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *22 May 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *5/22/06*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1 and 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent Application Publication No. 05-220865 to Adachi et al. (machine translation provided) in view of International Patent Application Publication No. WO 02/102579 to Suda and U.S. Patent No. 3,888,720 to Habert.

3. With respect to claim 1, Adachi et al. discloses a molding drum, including a transfer drum; said transfer drum being provided, on its outer peripheral surface, with a leading end application region, and a plurality of application regions following said leading end application region and arranged in the circumferential direction of the transfer drum, said application regions being divided into a plurality of low adhesion sections with a low adhesion force, and a plurality of high adhesion sections with a high adhesion force, said low adhesion sections and said high adhesion sections being alternately arranged in the width direction of the transfer drum; radial expansion/contraction means; said radial expansion/contraction means comprising collective expansion/contraction means and moving means (See Abstract, and paragraphs 0007, 0010, and Figures 3-4). Adachi et al. does not specifically disclose a receiver drum or aid collective expansion/contraction means comprising cam followers

which are pivoted to the high adhesion sections, respectively, and movable radially inwards and outwards, a rotary cam which can be rotated to move the cam followers radially inwards and outwards, and cam driving means for rotating the rotary cam in the circumferential direction of the transfer drum.

4. Suda discloses an apparatus for forming tire components including a receiving roller (11) capable of rotating in an opposite direction to the transfer drum (12; See Figures 1 and 3-1-4-2). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the receiving roller taught by Suda with the molding drum of Adachi et al. The motivation would have been to safely an efficiently remove the formed tire component from the molding drum.

5. Habert discloses a tire building machine including aid collective expansion/contraction means comprising cam followers which are capable of pivoting to the high adhesion sections, respectively, and capable of moving radially inwards and outwards, a rotary cam which can be rotated to move the cam followers radially inwards and outwards, and cam driving means for rotating the rotary cam in the circumferential direction of the transfer drum (column 2, lines 47-64; See Figure 8). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the expansion contraction means taught by Habert with the expanding/contracting molding drum of Adachi et al. The motivation would have been to provide reliable means for expansion and contraction of the molding drum.

6. Examiner notes the phrases, “for forming the sheet member by applying said plurality of strip members onto an outer peripheral surface of the transfer drum so that

the width direction of each strip member is oriented in the circumferential direction of the transfer drum", "for forming the cylindrical tire constitutive member by joining the leading end and the trailing end of the sheet member which has been transferred from the transfer drum", "said receiver drum rotated in an opposite direction to the transfer drum", "for applying a strip member forming said leading end of the sheet member", "at a pitch which corresponds to the width of the strip member", "for moving the high adhesion sections radially inwards of the low adhesion sections, said high adhesion sections and low adhesion sections being flush with each other when the narrow strip members are applied to the transfer drum, and said high adhesion sections being moved by said radial expansion/contraction means radially inwards of the low adhesion sections, when the sheet member is transferred from the transfer drum to the receiver drum", "or moving radially inwards the high adhesion sections in the leading end application region and the application region adjacent thereto, respectively", and "for individually moving radially inwards the high adhesion sections in the remaining application regions" are considered intended use of the current apparatus. The examiner would like to note that while features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. In re Schreiber, 128 F.3d 1473, 1477-78, 44 USPQ2d 1429, 1431-32 (Fed. Cir. 1997); "[A]pparatus claims cover what a device is, not what a device does." Hewlett-Packard Co. v. Bausch & Lomb Inc., 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990) (emphasis in original). A claim containing a "recitation with respect to the manner in which a claimed apparatus is intended to be employed does

not differentiate the claimed apparatus from a prior art apparatus" if the prior art apparatus teaches all the structural limitations of the claim. Ex parte Masham, 2 USPQ2d 1647 (Bd. Pat. App. & Inter. 1987). See MPEP § 2114. This rejection is based on the fact the apparatus structure taught above has the inherent capability of being used in the manner intended by the Applicant.

7. As to claim 4, Adachi et al. discloses the high adhesion sections in at least the leading end application region have outer surfaces in the form of mirror-finished surfaces (See Abstract).

8. As to claim 5, this claim is not found to structurally limit the current invention. The method of forming the mirrored surface does not structurally alter the mirrored surface. Adachi et al. discloses the mirror-finished surfaces are formed as high-adhesion surfaces (i.e. stuck powerfully and does not exfoliate easily; See paragraph 0007), which requires the same physical characteristics to perform the same function as that recited by applicant. Consequently, Adachi's disclosure of a high-adhesion mirror-finished surface appears to be the same as the plated mirror surface of applicant's disclosure. Once the Examiner provides a rationale tending to show that the claimed product appears to be the same or similar to that of the prior art, although produced by a different process, the burden shifts to applicant to come forward with evidence establishing an unobvious difference between the claimed product and the prior art product. *In re Marosi*, 218 USPQ 289, 292 (Fed. Cir. 1983).

9. As to claim 6, Adachi et al. discloses the low adhesion sections and the high adhesion sections in at least the leading end application region are arranged alternately in the axial direction (see paragraph 0007 and Figures 3-4).

10. Claims 2-3 rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent Application Publication No. 05-220865 to Adachi et al. (machine translation provided) in view of International Patent Application Publication No. WO 02/102579 to Suda and U.S. Patent No. 3,888,720 to Habert as applied to claims 1 and 4-6 above, and further in view of U.S. Patent No. 5,624,780 to Nishimori et al.

11. With respect to claim 2, Adachi et al. discloses a molding drum, including low adhesion surfaces (See paragraph 0007). However, Adachi et al. does not specifically disclose what material is used for the low adhesion surface.

12. Nishimori et al. discloses an image transfer roller, including using roller coated with a resilient material (i.e. silicone rubber) as a release surface to provide low adhesion (column 11, lines 4-9). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the resilient release material taught by Nishimori et al. with the molding drum of Adachi et al. The motivation would have been to prevent sticking of the substrate to the drum.

13. As to claim 3, Adachi et al. discloses a molding drum, including low adhesion surfaces (See paragraph 0007). However, Adachi et al. does not specifically disclose what material is used for the low adhesion surface.

14. Nishimori et al. discloses an image transfer roller, including using roller coated with silicone rubber as a release surface to provide low adhesion (column 11, lines 4-9). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the silicone rubber release material taught by Nishimori et al. with the molding drum of Adachi et al. The motivation would have been to prevent sticking of the substrate to the drum.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KIMBERLY K. MCCLELLAND whose telephone number is (571)272-2372. The examiner can normally be reached on 8:00 a.m.-5 p.m. Mon-Thr.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Philip C. Tucker can be reached on (571)272-1095. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kimberly K McClelland/
Examiner, Art Unit 1791

KKM

/Philip C Tucker/
Supervisory Patent Examiner, Art Unit 1791